DOCUMENT RESUME

ED 418 451 CS 509 819

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TITLE Cognitive Differentiation and Organizational Influence Tactics: Findings and Implications for Leaders as Agents of Influence.
PUB DATE 1998-04-00
NOTE 12p.; Paper presented at the Annual Meeting of the Central States Communication Association (Chicago, IL, April 2-5, 1998).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Cognitive Mapping; *Cognitive Structures; Communication Research; Higher Education; *Influences; *Leadership; *Organizations (Groups); Questionnaires; Student Reaction; Student Surveys; Teacher Student Relationship
IDENTIFIERS *Communication Behavior; Role Category Questionnaire (Crockett)

ABSTRACT

A study examined the relationships between cognitive differentiation and three methods of influence. A brief summary of cognitive differentiation examined the historical formulation, the organizational applications, and the measures and methods involved. Similarly, a review of organizational influence summarized the importance of influence as well as the organizational and leadership applications of influence. Subjects for the study were 238 students attending a mid-sized midwestern university who were selected from a wide range of liberal arts classes. Subjects completed the Role Category Questionnaire. Results indicated that the relationship between cognitive differentiation and influence was positive for team influence behaviors and charismatic influence behaviors. Findings suggest that differentiated individuals did not use more reward/punishment/manipulation influence behaviors than did less differentiated subjects. (Includes 2 tables of data; contains 18 references.) (Author/CR)

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ED 418 451

COGNITIVE DIFFERENTIATION AND ORGANIZATIONAL INFLUENCE TACTICS: FINDINGS AND IMPLICATIONS FOR LEADERS AS AGENTS OF INFLUENCE

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A paper presented to the
Organizational and Professional Communication Interest Group
Central States Communication Association Convention
Chicago, IL
April 1998

CS509819

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Abstract

This paper examines the relationships between cognitive differentiation and three methods of influence. A brief summary of cognitive differentiation examined the historical formulation, the organizational applications, and the measures and methods involved. Similarly, a review of organizational influence summarizes the important of influence as well as the organizational and leadership applications of influence. Subjects (N = 238) completed copies of the Role Category Questionnaire and the Assessment of Influence Behaviors. Findings suggest that people more cognitively differentiated used more charismatic and team influence, but no more reward/ punishment/manipulation influence than did less differentiated subjects. Specific conclusions and implications for leadership are addressed.

COGNITIVE DIFFERENTIATION AND ORGANIZATIONAL INFLUENCE TACTICS: FINDINGS AND IMPLICATIONS FOR LEADERS AS AGENTS OF INFLUENCE

Organizational researchers have looked at personality characteristics of leaders in a various ways. One of the more popular personality attributes has been the cognitive differentiation of leaders. Research by Zorn (1991) elaborates the strong relationship between transformational leadership and cognitive differentiation, but does not look at specific organizational behaviors that more cognitively differentiated individuals use. The production of organizational work is attributed to the phenomenon labeled "influence", but little research has attempted to flesh out the personal underpinnings of organizational influence. Similarly, while some comprehensive research has taken place regarding cognitive differentiation, little research has examined preferences for certain types of influence over others. Given the relative lack of research and the obvious overlap of these organizational topics it seems appropriate to critically and empirically examine the relationship between the two variables.

COGNITIVE DIFFERENTIATION

There are several alternative approaches to understanding cognition and human communication. One is the theory of cognitive complexity or, more recently named, cognitive differentiation. Early authors in the constructivist movement (Delia, 1977) discuss constructivism as a theory for understanding how people organize impressions. More recent research has focused on the importance of cognitive differentiation as a personal skill for adapting to various communication contexts.

Defining Constructs and Constructivism

Delia, O'Keefe, and O'Keefe (1982) suggested that a construct is an interpretive process carried out by each individual. It is an emergent creative activity through which social reality is constantly changing. Constructs are cognitive contrasts (similarities and differences) between the person and the world. A construct is a direct indicator of an individual's social cognitive skills (Sypher, 1984). O'Keefe and Sypher (1981) reason that constructs are bipolar dimensions of judgment through which people understand the world. As we become more cognitively differentiated, we become better able to build schemes that are more adaptive to the communication event. Applegate (1990) claims that the schemes are active rather than rule based; change occurs and the constructs adapt as people perceive different social situations. Crockett (1965) notes that cognitive complexity helps people make more reasonable assumptions, have a clearer understanding, and implicitly, make better choices in relational development. Also, more cognitively differentiated individuals have more constructs and those constructs are more hierarchically integrated. Applegate (1990) adds that more differentiated individuals have a greater understanding of others and

create a more complete and complex understanding of their social environment. He indicates that constructs play a major role in strategic communication goals: identity, relational, and instrumental.

Cognitive Differentiation in the Organization

Cognitive differentiation has been examined in many contexts with both adult and child subjects. Most relevant, however, is the research done in organizations dealing with individuals' social cognitive skills. Sypher (1984) suggested that cognitive differentiation skills are highly valued in organizational settings. More specifically, individuals create more person-centered communication strategies because of the perspective-taking skills that cognitive differentiation allows. Sypher also suggests that more differentiated individuals better understand their identity and are more likely to be self-monitoring. More differentiated individuals also have better listening skills (Sypher, Bostrom, & Seibert, 1989). Sypher (1984) indicates that cognitive differentiation assists people in predicting and controlling organizational events. Sypher and Zorn (1986) also claim that more differentiated individuals are more organizationally successful, attesting to the importance of cognitive differentiation. Zorn (1991) also examined cognitive differentiation and found that more differentiated individuals scored higher on transformational qualities than did their less differentiated counterparts. This finding clearly suggests that socio-cognitive skills are important to people in leadership roles, a response that Sypher (1990) likewise highlighted.

Measures and Methods

In measuring cognitive differentiation, Applegate (1990), O'Keefe and Sypher (1981), Sypher and Sypher (1988), and others suggest that the most appropriate measure must reflect the bipolar evaluations people make. Crockett's Role Category Questionnaire (RCQ) is a free response measure, asking respondents to consider their least and most liked individuals. O'Keefe and Sypher (1981) note that the RCQ is a better index of individual differences and of communication skills. Other measures are too highly correlated with verbal skills and intelligence or are not reliable enough; the RCQ satisfies all the criteria for a differentiation measure (Sypher & Sypher, 1988). Sypher and Sypher suggest that the free response element of the RCQ is a better indicator of cognitive differentiation than scales of traits. They also indicate that the RCQ has high inter-rater and test-retest reliability.

ORGANIZATIONAL INFLUENCE

The importance of influence is well established in the leadership literature. It is generally accepted that people with advanced influence behaviors are more effective at achieving their agenda. Yulk (1989) suggests "Power alone is not sufficient to explain a leader's effectiveness in influencing people. A leader's influence behavior and skills must be considered also if we want to make progress in understanding how leaders influence people" (p. 37). Yulk further elaborates that influence has been inadequately researched, research focusing on specific influence and power behaviors is needed. Barge (1994) identifies several different influence actions organized around four

independent strategies: reward, punishment, altruism, and rationale. Barge suggests that influence consists of more than one single attribute. DuBrin (1995) discusses the importance of influence for the leader. Over the past 20 years much has been written about team approaches to influence, and earlier much had been said about compliance-gaining strategies in organizations. DuBrin (1991) measured influence behaviors in a study designed to examine differences between males and females. His findings suggest that some influence tactics are more popular than others. Sypher (1990) contends that leadership is a communicative process. The leadership process is a process of influence, a function of the social cognitive skills of the leader. Sypher suggests that social cognitive skills are a necessary but not sufficient part of leadership. Zorn (1991) reports that transformational leadership and cognitive differentiation are related; more differentiated leaders create more person-centered communication (and can be agents of influence).

Influence and Cognitive Differentiation

Influence seems to be an important variable in relation to cognitive differentiation. The popularity of this line of research is best seen in comments made by Burleson and Waltman (1988), "Perhaps the largest body of constructivist research has focused on the relationship between developed systems of interpersonal constructs and the production of person-centered messages" (p. 15). Several studies have found the relationship between cognitive differentiation and the creation of person-centered messages to be strong (Applegate, 1990). Sypher (1984) suggests that social cognitive abilities allow people to predict and control events. Organizational members need cognitive complexity to function effectively. Sypher and Zorn (1986) found a strong correlation ($R^2 = .56$; $p < .001$) between cognitive differentiation and persuasive ability. Sypher and Zorn (1988) found that more cognitively differentiated individuals reported influence as an element they liked in co-workers. Sypher (1990) discusses the importance of socio-cognitive skills in creating persuasive messages. More importantly, however, Sypher also discusses the importance of social cognitive skills for effective leaders citing several studies that conclude influence is a major consideration in leadership, and social cognitive skills play a major role in influence. Clearly, the relationship between cognitive differentiation, influence, and leadership has been established.

Studies conducted in cognitive differentiation, like the studies in leadership, discuss the importance of influence. Sypher and Zorn (1986) found support for the idea that more differentiated people were seen as more influential. However, their measure of persuasive ability deals with the written construction of a message, not organizational behavioral anchoring. The message is rated according to the advancedness of the persuasive tactic rather than a series of behaviors that could occur. More study is needed to understand the relationship between cognitive differentiation and specific organizational influence behaviors.

RQ_1: What is the relationship between cognitive differentiation and influence behaviors?

METHOD

Subjects

The sample for this study was taken from students attending a mid- sized Midwestern university. Students were selected from a wide range of liberal arts classes, many were communication classes. Of the sample, 19% were less than 20 years, 70% were between 20 and 29, 6% were 30 to 39 years of age, and the remainder were above 39 years of age. Of the subjects responding (n = 237), 34% had less than one year full time work experience. Only 10% had less than one year part-time work experience.

Instruments

Role Category Questionnaire. The Role Category Questionnaire (RCQ) (Crockett, Press, Delia, & Kenney, 1974) was administered to all subjects. Sypher and Sypher (1988) report that the RCQ has high test-retest reliability. The RCQ was modified asking subjects about both a friend and a person they disliked in their social network. Two independent coders were trained according to the standards developed by Crockett, Press, Delia, and Kenney (1974). Following training, the coders achieved high inter-coder reliability (94% percent agreement on constructs coded). Later, inter-coder reliability was calculated and found to be approaching 100% (98% percent agreement on constructs coded). Total constructs were calculated for each subject, based on the addition of the constructs of the liked individual and the constructs of the disliked individual. A median split (Man = 22) of the construct variable was performed and subjects were categorized as high or low cognitive differentiation based on the total of their liked and disliked constructs.

Assessment of Influence Behaviors. One final instrument was revised to assess attitudes of various forms of organizational influence. Subjects responded to 20 specific influence behaviors. DuBrin (1991) used the "Survey of Influence Tactics" to assess the sex and gender differences among working adults. The DuBrin (1995) revised survey was modified by changing the structure of some items and adding four items after a pilot (N = 101) revealed unacceptable reliability for the overall scale.

Following the administration of the revised device (n = 235) the alpha reliability on the overall assessment was satisfactory (α = .77). Three specific subscales were examined for alpha reliability: team influence behaviors (α = .71), charismatic influence behaviors (α = .63), and reward/punishment/manipulation influence behaviors (α = .70). Given the early nature of the research the subscale reliabilities were acceptable given the improvement over the pilot and the acceptable overall reliability of the instrument.

Procedure

A pilot study of the two survey forms was administered to college students (N = 101) in communication classes at a mid-sized Midwestern university. The reliability analysis was conducted to determine poor wording and adjust the ordering of items. Items were added in an effort to improve reliability of subscales.

In the final survey instrument there were four assessment devices included: the Role Category Questionnaire, the Assessment of Influence Behaviors, seven

demographic questions, and one other measure unrelated to the current report. The instrument was administered during class to several communication and leadership classes. Students were instructed on the nature of the survey battery as well as directions for the timely completion of the surveys. Students were given five minutes for each narrative on the RCQ, and approximately ten minutes for the remaining questions. Following administration of the instrument, students were debriefed about the nature of the assessment and the outcomes of the assessment.

Data Analysis

Following data entry, several relationships were examined in relation to RQ_1. In addition, reliabilities were calculated for each scale and subscale. One-way ANOVAs were computed examining differences among high and low RCQ subjects in relation to the influence behaviors used. Correlation and regression analysis was implemented to examine the relationship between the continuous cognitive differentiation variable and the three types of influence methods. During interpretation, the criterion for significance was set at $p < .05$. The data was analyzed by using SPSS for Windows 6.1.

RESULTS

Subjects ($n = 233$) completed both the liked and disliked section of the RCQ. The range of scores and mean for the liked (R = 24, $M = 12.56$) and for the disliked (R = 21, $M = 10.31$) were consistent with prior research. For the combined variable, the mean score was 22.84 and the range was 44. This continuous variable was split at the median with approximately 122 subjects (at the median point - 22 - or below) were classified as low differentiated while 111 subjects were characterized as highly differentiated. As expected, there was a high correlation between the continuous RCQ variable and the discrete RCQ variable ® = .82, p = .0001).

In relation to the measures of influence and in response to RQ_1, there were no differences detected between the high and low differentiated subjects on the reward/punishment/ manipulation variable ($F = 1.214$; $df = 1, 231$; ns). However, more differentiated subjects were more likely to be charismatic ($F = 8.48$; $df = 1, 231$; $p = .004$) and use team influence behaviors ($F = 6.58$; $df = 1, 233$; $p = .011$) than their less differentiated counterparts.

Means and standard deviations for each of the three influence subscales can be found in Table 1. An examination of the means suggests that individuals self-report higher ratings of team and charisma influence behaviors rather than the use of reward/ punishment/manipulation influence behaviors.

Correlation analysis of cognitive differentiation, charisma, reward/punishment/ manipulation, and team influence behaviors yielded some interesting findings as reported in Table 2.

Table 1
Means and Standard Deviations for Three Subscales of Influence Behaviors

Subscale	*Mean*	*Standard Deviation*
Charisma	3.73	.50
Team	3.94	.50
Reward/Punishment/ Manipulation	2.58	.50

Table 2.
Correlation Matrix for Cognitive Differentiation and Influence Methods

	Cognitive Differentiation	*Charisma Influence*	*Reward/ Punishment/ Manipulation Influence*	*Team Influence*
Cognitive Differentiation				
Charisma Influence	R^2 = .151 p = .011			
Reward/ Punishment/ Manipulation Influence	R^2 = -.060 p = .182	R^2 = .300 p = .0001		
Team Influence	R^2 = .199 p = .001	R^2 = .511 p = .0001	R^2 = .061 p = .181	

Finally, a simple regression examined the predictive relationship between cognitive differentiation and charisma, reward/punishment/manipulation, and team influence methods. Results of the overall model (combining all three influence behaviors) suggested that together they significantly predict cognitive differentiation ($F = 4.107$; $df = 3, 225$; $p = .007$). Individually, charisma was a significant predictor of cognitive differentiation ($F = 5.525$; $df = 1, 231$; $p = .019$). Reward/punishment/ manipulation was not a significant predictor of cognitive differentiation ($F = 1.128$; $df = 1, 231$; $p = .29$). Team influence behavior was also a significant predictor of cognitive differentiation ($F = 9.386$; $df = 1, 231$; $p = .002$).

DISCUSSION AND CONCLUSIONS

The relationship between cognitive differentiation and influence was positive for team influence behaviors and charismatic influence behaviors. But more differentiated individuals did not use more reward/punishment/ manipulation influence behaviors than their less differentiated counterparts. These results verify the findings of the Syphers, Bostrom, Applegate and others extolling the relationship between cognitive complexity and person-centered influence behaviors. Team and charismatic influence behaviors are likely to have the personal interests of the parties in mind to be credible, while the use of reward/punishment/manipulation is seen as a transactional strategy (Zorn, 1991) rather than a strategy that promotes the relationship.

Several implications for leadership emerge from this research. First, there is good reason to believe that certain influence behaviors may produce more effective leadership behaviors. Research by Sypher (1990) and Zorn (1991) suggests that leaders should be exhibiting person centered influence tactics that focus on the needs of the follower rather than solely on the needs of the leader. Zorn further indicates that transformational leadership and cognitive differentiation are closely related. The current research suggests that people with more developed socio-cognitive skills are better equipped to use charismatic and team influence methods, and equally able to use reward/punishment/manipulation influence as those less differentiated. If Sypher's research tells us anything it should suggest that leaders need a variety of influence skills in their "toolbox". Leaders with more developed socio-cognitive skills have a clear advantage over those leaders without developed socio-cognitive skills.

The second implication for leadership that emerges from the current research stems from the differences between the three types of influence. Those individuals that are more differentiated tended to use influence methods that are generally considered to be more mature. It is notable that the influence methods that are more predictive of cognitive differentiation are charisma and team methods. Those methods would be more person centered given the lack of direct transaction involved in either method. Reward/punishment/manipulation influence is more appropriate for less differentiated people given the relative ease of transaction. Furthermore, research on transformational leadership would generally support the idea that transformational leadership is an advanced type of leadership built on the basis of transactional leadership. This research empirically confirms the prior finding given the significant differences for charismatic and team methods (transformational leadership) but not for reward/punishment/manipulation influence (transactional leadership).

The final implication for leadership is purely prescriptive and developmental. Research on leadership is often built on the assumption that leadership development is not merely a passing interest, rather it is the critical interest. This research supports two different leadership building directions. First, leaders should develop and use influence methods that are generally considered transformational. Second, the use of more advanced influence methods is perceived as person-centered and produces better results.

Several specific recommendations emerge as possible ways to utilize different methods of influence:

* Be willing to try other methods as new (or old) situations dictate
* If your habitual methods do not produce results, try others
* Emulate role models of influence
* Take note of the organizational culture you work in; some cultures may permit certain types of influence and discourage others
* Try to study your common influence methods
* Take time to study the successes and failures when you influence others
* Design and commit to a plan to develop your own leadership/influence behaviors

The second developmental issue suggests that more effective leaders should try to be more cognitively differentiated. Changing methods of influence is a more realistic goal in terms of leadership development, but as with leadership development, socio-cognitive skills are learnable and should be used as a method to improve leadership effectiveness. Since cognitive differentiation deals as much with communication as with the actual cognitive skills a developmental strategy should deal with both as well. A few specific suggestions to develop socio-cognitive skills would include:

* Move the center of your communication beyond yourself, become other-centered
* Tap your own mental resources
* Force cognitive elaborations of relationships, people, and objects
* Think beyond the present, begin to look at integrating past, present, and future
* Listening is an important socio-cognitive activity, go beyond simply hearing others
* Ask questions that help you fill in the gaps, to build a more elaborate schema about others you probably need more information
* Design and commit to a plan to develop your personal cognitive and communicative abilities

While there is clear evidence of the relationship between leadership, influence, and cognitive differentiation there is still much need for advanced research. Finding specific behaviors that promote transformational leadership is a priority. Development of strategies to promote mature influence and cognitive differentiation of leaders should be considered as a tool to improve leadership effectiveness. This research has shown that a strong link exists between certain influence behaviors and cognitive differentiation, future research should further flesh out these findings in more specific contexts.

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